

ACMI SCREEN EDUCATION

FILMMAKING ACROSS THE CURRICULUM: A BEGINNER'S GUIDE

PRODUCTION

Contents

Crew Roles

Organising Equipment

The Production Schedule

Technical Skill Development:

- Using the Camera

- Tips for Improving Picture Quality

- Tips for Improving Lighting Quality

- Tips for Improving Sound Quality

The Day of the Shoot – Organisation

The Shoot – Production Procedures

- Live Action Shoot

- Animation Shoot

What Next?

Crew Roles

Explain the crew jobs required. It is useful to have students rotate through the roles to gain experience of the different responsibilities. Crew could be allocated per scene as part of the production schedule.

Key roles:

Director – responsible for directing the actors and the crew to get the best possible outcome for each scene. The Director must be absolutely familiar with the script dialogue and action, and with the storyboard plan for shooting the scene. The Director needs to focus crew attention on maintaining technical quality, especially lighting and sound quality at all times. The Director ensures everyone and everything is in place, and actions filming to begin and to stop.

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Camera Operator – operates the camera, and works with the Director to shoot the scene as planned on the Storyboard. Responsible for setting up the equipment, carefully framing each shot, and shooting the highest quality footage possible.

Production Assistant – assists the Director, keeping the set clear and watching out for possible problems at all times. Responsible for keeping track of tapes to avoid taping over previously recorded footage. Also responsible for keeping a Shot Record for each scene, noting the best takes and any problems in order to cut down time later in postproduction.

Technical Quality Control – these jobs are all important both in preparation for the shoot and during it.

- **Lighting** - check that the lighting is correct for the scene. Can you see your subject? Does the lighting enhance the mood of the scene? (See further information below.)
- **Sound** - check that no extra sound or noise will spoil the shot. (See further information below.)
- **Continuity** - if the scene has a direct link to one before it, make sure that actors and props stay the same between takes. For example, check position on set, props, costumes, hair, and level of drinks. Look for things such as a wall clock that might show time gaps, and significant changes of light or shadows over time.

Organising Equipment

Plan the *Class Equipment Schedule* across groups to stagger demand on equipment and resources. Ensure groups are booked to use cameras and editing equipment at different times. Use this information to help students plan their own production schedules. Book the best-prepared groups in first.

See Worksheet 1 for a [Live Action Equipment Schedule](#). Here is a sample:

Group Name and Dates	Camera	Charged batteries	Tripod	Mini DV tape
Super Dudes Tues 5 April	#1	2	1	1
Borrowed:	5/04	5/04	5/04	5/04
Returned:	5/04	5/04	5/04	
Girls Gang Wed 6 April				

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See Worksheet 2 for an [Animation Equipment Schedule](#). Here is a sample:

Group Name and dates	Camera	Charged batteries	Tripod	Mini DV tape	Computer	Software	Cables	Lights
Group 1 Tuesday 5 April	1	2	1	1				
Borrowed:	5/04	5/04	5/04	4/04	5/04	5/04	5/04	5/04
Returned:	5/04	5/04	5/04					
Group 2 Wed 6 th April	1	2	1	1				

The Production Schedule

Each group needs to create a *Production Schedule* and stick to it.

This provides details of:

- times
- locations
- equipment required
- resources required such as props and costumes
- cast required
- crew required
- the order of the shoot.

Every member of the crew needs to know exactly what is happening, when and where, and what is required of them.



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See Worksheet 3 for a [Production Schedule](#).

Example of a Production Schedule:

Production Schedule for The Adventures of Super Dude						
Shooting Date: Tuesday 6 April						
Shoot order	Time	Location/animation set	Equipment	Props, costumes	Cast	Crew
Scene 1.	10 am	School car park	Camera, tripod. Labelled mini DV tapes. Batteries, (charged). Spare batteries, (charged).	Toy sword, large hat, hobbyhorse, large feathers.	Juniata Super Dude Two henchmen	Director: Isobel W Camera operator: Hamish Assistant: Georgina Continuity/Lighting: William B
Scene 2.	11 am	Lower playground				

Technical Skill Development

Students need to be comfortable with the equipment and confident of their skills before beginning to shoot their film. You may wish to use the camera's automatic settings until you and your students have developed basic camera skills. The three main technical areas to work on to ensure a quality production are; camera, sound and lighting. Be aware that the quality of the sound and the lighting is often the 'make or break' of student films. Select the locations carefully and check lighting and sound before shooting.

Using the Camera

Mini DV cameras are easy to use. The quality of the final film depends far more on the technique of the camera operator than the technology.

Read the manual and learn how the camera works before you demonstrate it to the students. Know your camera's default settings, so you can put them back if the students change them. (Don't use the camera to add special effects as these cannot be removed afterwards and shots are easily spoiled.)

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To begin, you need to know:

Camera safety

Practise handing the camera back and forth between people – touch hands, look into the eyes of the person handing you the camera and confirm, “I have got it”. If not using a tripod, make sure the camera’s strap is around the user’s neck.

Putting the film in

Discuss the camera’s mechanism and the need to be gentle with it. Demonstrate how to open the camera and load the film. The camera can be easily damaged if this is not done correctly. (With younger students it is safer to load and take out the film yourself.)

Charging and loading batteries

Demonstrate and practice charging camera batteries fully and changing batteries in the camera.

Operating the camera

Demonstrate buttons – RECORD, PAUSE, STOP, FOCUS and ZOOM.

Have students shoot test footage to try different features. Check the results in the camera viewfinder and try to make improvements in the next shot. Students should practice until they are confident using the camera.

Tips for Improving Picture Quality

Before rolling, check the following to ensure good quality filming:

- Leave a space at the beginning and end of each shot – don’t start or stop too abruptly. (Videotape takes a couple of seconds to roll forwards after pressing record.)
- Look through the viewfinder. When using batteries avoid the flip out window as it uses up more battery power.
- Use a tripod whenever possible to avoid camera wobble. If a tripod is not available, set the camera up on a stable surface to shoot from.
- Use handheld shots only if *absolutely* essential. To do this, hold for 10 seconds on each part and then *slowly* pan to the next shot. Hold 10 seconds and then stop. This will help ensure that the beginning, middle and end of the shot are all smooth.

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- Use *manual focus*, not automatic, once you are more confident. (Auto-focus is useful when starting off but results can be disappointing.)
- For effective manual focus: turn focus to manual, zoom in as far as possible and manually adjust the focus on your subject so that it is sharp, zoom out to the required frame size.
- *Frame* your shot. Think carefully about exactly what you want to see in the frame – and what you want to leave out.
- Avoid *zooming* and endless *panning*. It looks jerky and is unprofessional.
- Press *pause* between scenes rather than stop.

Tips for Improving Lighting Quality

You need light to see your subject. Use brightly lit environments where possible. Before rolling, check the following to ensure good quality filming:

- Can you see everything clearly in the frame?
- Is the natural lighting suitable? How will the natural light change over time?
- Look out for shadows.
- Take care with direct sunlight because it produces flare in the camera lens and harsh shadows.
- Don't shoot towards the light (unless you want a silhouette effect).

Tips for Improving Sound Quality

It is important to be able to hear dialogue easily and to make sure that wind and peripheral noise don't spoil the shot. Check the following:

- Are you using just the camera microphone or do you have additional microphones?
- Test audio in all your locations. What is the best possible distance from the camera to get good sound? Keep the microphone as close to your subject as possible to reduce the impact of extraneous sound and to get the best recording.

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- What is the location sound like? Check for any peripheral noise such as loud traffic, trains, playgrounds, air-conditioning that may affect your shoot.
- Try to shoot out of the wind as this can easily spoil a shot.
- Avoid rooms with hard floors that clatter or echo. Look for carpet and soft floor coverings to contain sound.

The Day of the Shoot – Organisation

See Worksheet 4 for a [Pre-shoot Checklist](#).

Pre-Shoot Checklist

Before you go:

- Gather the camera equipment, scripts and props together.
- Check you have mini DV tapes AND (fully charged) batteries
- Label mini DV tapes before shooting to keep track of footage shot.

On Set:

- Check camera isn't displaying the date and time
- Focus camera
- Check for background sound and other distractions
- Check sound levels
- Check lighting. Make sure the light source is behind the camera.
- Check the framing of the shot.
- Check how the background looks in the shot.
- Shoot a few seconds and play back to check everything is working, including sound.



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The Shoot –Production Procedures

1. Specific **conventional shoot** instructions:

Keep a SHOT RECORD for each scene, noting the best takes and any problems. This will be invaluable in cutting down postproduction time.

Or

2. Specific **in-camera edit** instructions:

- Leave at least 15 seconds of black at the beginning of the shoot so the first scene is not too close to the start. It may get cut off.
- Shoot TITLES first with a TITLE CARD to introduce the film.
- Shoot each scene, shot by shot in storyboard sequence, using the PAUSE button between shots. For example, you may shoot a wide shot of the scene, PAUSE, cut to a mid shot of the characters, PAUSE, shoot back to the wide shot etc.
- Try to end each shot neatly. Press PAUSE between scenes rather than STOP.
- At the end, shoot a CREDITS card for your film.

Live Action Shoot

The technical crew sets up the equipment.

The Director works with the actors to decide how they will move and deliver their lines.

Rehearse the shot a few times before beginning to record.

See Worksheet 5 for a sample of a [Live Action Shoot Procedure](#).

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Animation Shoot

Camera Set Up

Flat images such as cell animations and cut outs are usually filmed on a flat surface with the camera on a stand or tripod looking down on them.

3-D model animation can be shot from any angle, just like live action film.

Use a tripod if possible. Mark the spot with a tape cross or mark on the floor to maintain consistency. Do not BUMP camera!

If no tripod is available, place the camera on a marked spot.

Lighting

It is really important to light your scene properly. A lamp on either side of the camera works well. Keep the light constant and watch for shadows made by people moving nearby.

Filming Animation – General Guide

Follow the **storyboard** guidelines to set up and shoot each scene in sequence.

You may need to shoot **titles** first.

Frame the picture carefully. Fill the viewfinder with the scene.

Shoot two shots of each frame if using stop-motion animation software.

Move your character making gradual changes between shots to create a smooth action. (Practise this to see how big the moves between shots can be. If too big, the finished version looks very jerky.)

Don't forget to use close-ups, panning and lighting to create special effects and mood.

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What Next?

If you are doing the conventional shoot you are now ready for post-production.

If you are doing the **in-camera edit**, your film is now finished!

You can plug your video camera into the nearest TV monitor using the VHS leads and sit back and enjoy your film.

The final steps are covered in *Filmmaking Across the Curriculum: a Beginner's Guide to Post-Production*.

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Production Resources Kit- Classroom Worksheets

Worksheet 1. Live Action Equipment Schedule

Group Name and Dates	Camera	Charged batteries	Tripod	Mini DV tape
Borrowed:				
Returned:				
Borrowed:				
Returned:				
Borrowed:				
Returned:				
Borrowed:				
Returned:				

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Worksheet 2. Animation Equipment Schedule

Group Name & Dates	Camera	Charged batteries	Tripod	Mini DV tape	Computer	Software	Cables	Lights
Borrowed:								
Returned:								
Borrowed:								
Returned:								
Borrowed:								
Returned:								
Borrowed:								
Returned:								

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Worksheet 3. Production Schedule

Title of Production:

Shooting Date:

Shoot order	Time	Location/ animation set	Equipment	Props, costumes	Cast	Crew

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Worksheet 4. Pre-Shoot Checklist

Before you go

- ☐ Gather the camera equipment, scripts and props together.
- ☐ Check you have mini DV tapes AND (fully charged) batteries.
- ☐ Label mini DV tapes before shooting to keep track of footage shot.

On Set

- ☐ Check camera isn't displaying the date and time.
- ☐ Focus camera.
- ☐ Check for background sound and other distractions.
- ☐ Check sound levels.
- ☐ Check lighting. Make sure the light source is behind the camera.
- ☐ Check the framing of the shot.
- ☐ Check how the background looks in the shot.
- ☐ Shoot a few seconds and play back to check everything is working including sound.

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Worksheet 5. Sample Live Action Shoot Procedure

Do not use voice instructions. Use silent signals to indicate “ACTION”, “ROLLING” and “CUT”.

The director stands beside the camera, crew in position.

Director: “Quiet on set”

Director: “Standby to record”

Crew: “Standing by”

Director: “Roll tape”

Camera Operator- presses RECORD and indicates “ROLLING” when the REC symbol appears in the viewfinder.

Director: “Mark It” (For an IN CAMERA EDIT do not MARK shots.)

Crew member marks the shot with a clapperboard or a piece of paper - Scene XXX, TAKE XXX.

Crew Member: “Scene five, Take one”

Director waits one or two seconds then raises hand to count actors in silently using fingers – 5,4,3, 2, 1, and a wave of the hand for “ACTION”.

Actors begin.

Director indicates “CUT” with a hand movement. Actors hold positions.

Camera operator waits for one or two seconds before pausing the camera. Check that PAUSE appears.
Camera operator indicates camera has stopped rolling.

The Director decides if the take is good enough to proceed with or if it needs to be re-shot.

Shoot CREDITS for **in-camera edit**.